change the medical protocols at any time the board so determines. The physical examination of an applicant for the position of police officer, police matron, or fire fighter shall be conducted after a conditional offer of employment has been made to the applicant. An applicant shall not be discriminated against on the basis of height, weight, sex, or race in determining physical or mental ability of the applicant. Reasonable rules relating to strength, agility, and general health of applicants shall be prescribed. The costs of the physical examination required under this subsection shall be paid from the trust and agency fund of the city.

Sec. 2. EFFECTIVE DATE. This Act takes effect July 1, 2008.

Approved May 21, 2007

CHAPTER 168

ENERGY INDEPENDENCE, EFFICIENCY, AND RELATED RESEARCH AND DEVELOPMENT

H.F. 918

AN ACT establishing the office of energy independence and the Iowa power fund and related provisions, and providing an effective date.

Be It Enacted by the General Assembly of the State of Iowa:

SUBCHAPTER I GENERAL PROVISIONS

Section 1. <u>NEW SECTION</u>. 469.1 DEFINITIONS.

For the purposes of this chapter:

- 1. "Board" means the Iowa power fund board created in section 469.6.
- 2. "Committee" means the due diligence committee created in section 469.7.
- 3. "Director" means the director of the office of energy independence.
- 4. "Foreign" means a locality outside of or nation other than the United States, Canada, or Mexico.
 - 5. "Fund" means the Iowa power fund created in section 469.9.
 - 6. "Office" means the office of energy independence.

Sec. 2. NEW SECTION. 469.2 OFFICE OF ENERGY INDEPENDENCE.

The office of energy independence is established to coordinate state activities concerning energy independence.

Sec. 3. <u>NEW SECTION</u>. 469.3 DIRECTOR OF OFFICE OF ENERGY INDEPENDENCE.

- 1. A director of the office of energy independence shall be appointed by the governor, subject to confirmation by the senate, and shall serve at the pleasure of the governor. The governor shall fill a vacancy in the office in the same manner as the original appointment was made. The director shall be selected primarily for administrative ability and knowledge concerning renewable energy, renewable fuels, and energy efficiency. The salary of the director shall be fixed by the governor.
 - 2. The director shall do all of the following:
 - a. Direct the office of energy independence.

- b. Coordinate the administration of the Iowa power fund.
- c. Lead outreach and public education efforts concerning renewable energy, renewable fuels, and energy efficiency.
 - d. Pursue new research and investment funds from federal and private sources.
- e. Coordinate and monitor all existing state and federal renewable energy, renewable fuels, and energy efficiency grants, programs, and policy.
- f. Advise the governor and general assembly concerning renewable energy, renewable fuels, and energy efficiency policy and legislation.
- g. Establish performance measures for determining effectiveness of renewable energy, renewable fuels, and energy efficiency efforts.
- h. Contract for and utilize assistance from the department of economic development regarding administration of grants, loans, and other financial incentives related to section 469.9, subsection 4, paragraph "a", subparagraph (1), the department of natural resources and the utilities board regarding assistance in the administration of grants, loans, and other financial incentives related to section 469.9, subsection 4, paragraph "a", subparagraph (2), and other state agencies as appropriate.
 - i. Develop an Iowa energy independence plan pursuant to section 469.4.
- j. Submit an annual report to the governor and general assembly by November 1 of each year concerning the activities and programs of the office, Iowa power fund, and other departments related to renewable energy, renewable fuels, and energy efficiency. The report shall include an assessment of needs with respect to renewable energy, renewable fuels, and energy efficiency efforts and policy and fiscal recommendations for renewable energy, renewable fuels, and energy efficiency. In addition, the director shall review issues relating to the transportation of biofuels and explore leading and participating in multistate efforts relating to renewable energy and energy efficiency.
- k. Adopt rules pursuant to chapter 17A concerning the office, the Iowa power fund, and the programs and functions of the office and the fund.

Sec. 4. <u>NEW SECTION</u>. 469.4 IOWA ENERGY INDEPENDENCE PLAN.

- 1. The director shall develop an Iowa energy independence plan with the assistance of the department of natural resources as provided in section 473.7, and in association with public and private partners selected by the director including representatives of the energy industry, environmental interests, agricultural interests, business interests, other interested parties, and members of the general public. The plan shall be subject to approval by the board.
- 2. The plan shall provide cost-effective options and strategies for reducing the state's consumption of energy, dependence on foreign sources of energy, use of fossil fuels, and greenhouse gas emissions. The options and strategies developed in the plan shall provide for achieving energy independence from foreign sources of energy by the year 2025.
- 3. The plan shall be initially submitted to the governor and members of the general assembly by December 14, 2007, and by December 14 annually thereafter. The plan shall be made electronically available to the public. The director shall conduct public meetings around the state to gather input to be used in developing the plan.
- 4. The plan shall identify cost-effective options and strategies that will allow the state to accomplish the following:
- a. Maximize use of emerging technologies and practices to enhance energy efficiency and conservation and develop alternative and renewable energy sources.
 - b. Retain and create high-quality jobs that provide good wages and benefits.
- c. Enhance the development of the state's bioeconomy including but not limited to the design, construction, operation, and maintenance of bioengineering, biorefining, and other bioproduct manufacturing facilities in this state.
 - d. Encourage federal, local, and private industry investment in the state's bioeconomy.
- e. Promote sustainable land use, soil conservation, clean air, sustainable water supply, and clean water practices.
 - f. Reduce greenhouse gas emissions, both on an aggregate and per capita basis.

- g. Advance the interests of crop, biomass, and livestock producers and biofuel and other bioproduct manufacturers.
- h. Identify the road, transit, trail, rail, pipeline, transmission, distributed generation, and other infrastructure investments needed to enhance the state's energy independence efforts.
- i. Identify strategies to increase affordability of energy for individuals, families, organizations, and businesses, including low-income persons.
- j. Review and assess the effectiveness of existing state programs, including but not limited to financial assistance programs and tax policies, in enhancing the state's energy independence efforts.
- k. Develop short-term and long-term recommendations for the role of individuals, families, community organizations, cities, counties, public and private education institutions, and state agencies in enhancing the state's energy independence efforts.
- l. Develop short-term and long-term recommendations regarding state energy regulatory policy.

Sec. 5. NEW SECTION. 469.5 INTELLECTUAL PROPERTY.

The director shall promote utilization across the state of the results of research, development, and commercialization activities funded in whole or in part by the Iowa power fund. The director is authorized to negotiate provisions with applicants that address issues relating to income generated from patents, trademarks, licenses, or royalties expected to be produced as a result of moneys proposed to be expended from the fund. The director may seek assistance from appropriate state agencies or outside expertise. An applicant shall not be prevented from protecting any previously developed intellectual property.

Sec. 6. <u>NEW SECTION</u>. 469.6 IOWA POWER FUND BOARD.

- 1. An eighteen-member Iowa power fund board is created with the following membership:
- a. The chairperson of the utilities board or the chairperson's designee.
- b. The director of the department of economic development or the director's designee.
- c. The director of the department of natural resources or the director's designee.
- d. The secretary of agriculture or the secretary's designee.
- e. Seven members appointed by the governor subject to confirmation by the senate. All appointees shall represent nonpublic organizations or businesses, or research institutions, and must demonstrate experience or expertise in one or more of the fields of renewable energy, renewable fuels, agribusiness, energy efficiency, greenhouse gas reductions, utility operations, research and development of new technologies, commercialization of new technologies, economic development, and finance.
 - f. Seven members serving in an ex officio, nonvoting capacity, appointed as follows:
 - (1) One member of the senate appointed by the majority leader of the senate.
 - (2) One member of the senate appointed by the minority leader of the senate.
- (3) One member of the house of representatives appointed by the speaker of the house of representatives.
- (4) One member of the house of representatives appointed by the minority leader of the house of representatives.
- (5) One member representing the state board of regents appointed by the president of the state board of regents.
- (6) One member representing the community colleges appointed by the executive director of the Iowa association of community college presidents.
- (7) One member representing independent colleges and universities appointed by the president of the Iowa association of independent colleges and universities.
 - A legislative member is eligible for per diem and expenses as provided in section 2.10.
- 2. The members appointed by the governor shall be appointed for three-year staggered terms beginning and ending as provided in section 69.19. Avacancy on the board shall be filled for the unexpired term in the same manner as the original appointment was made.
 - 3. The members of the board shall be reimbursed for actual and necessary travel and related

expenses incurred in the discharge of official duties. Each member of the board may also be eligible to receive compensation as provided in section 7E.6.

- 4. A majority of the voting members of the board constitutes a quorum, and a majority of the total voting membership of the board is necessary to act in any matter within the jurisdiction of the board.
 - 5. The duties of the board include all of the following:
- a. Consider and approve grants, loans, or investments and other financial incentives made from the fund.
 - b. Advise the director concerning strategic direction for the fund.
- c. Provide the governor with advice concerning economic development, policy, technical issues, and strategic direction concerning renewable energy, renewable fuels, and energy efficiency.
- d. Direct moneys from the fund to be used to purchase private or public technical assistance needed to conduct due diligence activities and to develop an Iowa energy independence plan.

Sec. 7. <u>NEW SECTION</u>. 469.7 DUE DILIGENCE COMMITTEE.

- 1. A seven-member due diligence committee is created to review applications that will come before the board for financial assistance from moneys in the fund. The committee, after a thorough review, shall determine whether a proposed project using moneys from the fund is practical, economically feasible, and furthers the goals of the fund, and shall provide recommendations to the board regarding any moneys proposed to be expended from the fund. The recommendations may be conditional or recommend that a proposal be rejected. Membership of the committee shall consist of the following:
- a. One member designated by the director of the office of energy independence with expertise in the financing of new businesses and leveraging federal and private sources of funding.
 - b. One member designated by the president of the state board of regents.
 - c. One member designated by the director of the department of economic development.
 - d. One member designated by the director of the Iowa energy center.
- e. One member from a single bioscience development organization determined by the director of the department of economic development to possess expertise in the promotion and commercialization of biotechnology.
 - f. Two members of the Iowa power fund board designated by the chairperson of the board.
- 2. A majority of the members of the committee shall constitute a quorum, and a quorum shall be necessary to act on any matter within the jurisdiction of the committee.
- 3. The director of the office of energy independence shall provide office space, staff assistance, and necessary supplies and equipment to the committee. The director shall budget moneys to pay the compensation expenses of the committee. In performing its functions, the committee is performing a public function on behalf of the state and is a public instrumentality of the state.

Sec. 8. NEW SECTION. 469.8 CONFLICTS OF INTEREST.

If a member of the board or due diligence committee has an interest, either direct or indirect, in a project for which financial assistance may be provided by the board, the interest shall be fully disclosed to the board in writing. The member having the interest shall not participate in the decision-making process with regard to the provision of such financial assistance to the project.

Sec. 9. NEW SECTION. 469.9 IOWA POWER FUND.

- 1. An Iowa power fund is created in the state treasury under the control of the office. The fund shall be separate from the general fund of the state and the balance in the fund shall not be considered part of the balance of the general fund of the state. However, the fund shall be considered a special account for the purposes of section 8.53, relating to generally accepted accounting principles.
 - 2. The fund shall be used to further the goals of increasing the research, development, pro-

duction, and use of biofuels and other sources of renewable energy, improve¹ energy efficiency, and reduce² greenhouse gas emissions, and shall encourage, support, and provide for research, development, commercialization, and the implementation of energy technologies and practices. The technologies and practices should reduce this state's dependence on foreign sources of energy and fossil fuels. The research, development, commercialization, implementation, and distribution of such technologies and practices are intended to sustain the environment and develop business in this state as Iowans market these technologies and practices to the world.

- 3. The fund shall consist of appropriations made to the fund and other moneys available to and obtained or accepted by the office from federal or private sources to the credit of the fund. Notwithstanding section 12C.7, subsection 2, interest or earnings on moneys in the fund shall be credited to the fund.
- 4. a. Moneys available in the fund for a fiscal year are appropriated to the office to be used in providing financial assistance to entities conducting business, research, or programs in Iowa:
- (1) To accelerate research and development, knowledge transfer, technology innovation, and improve the economic competitiveness of efforts furthering the goals stated in subsection 2.
- (2) To increase the demand for and educate the public about technologies and approaches furthering the goals stated in subsection 2.
- b. Eligibility criteria for grants awarded or loans made pursuant to paragraph "a" after due diligence activities shall be established by the director by rule, and shall include documentation relating to the actual or potential development of the following:
- (1) Commercialization of technology and product development for sale in the national and international market.
- (2) Utilization of crops and products grown or produced in this state that maximize the value of crops used as feedstock in biomanufacturing products and as coproducts.
 - (3) Reduction of greenhouse gas emissions and carbon sequestration.
 - (4) Private or federal matching funds.
- c. The board may reclaim any moneys granted or loaned if the commitments set forth in the documentation required pursuant to paragraph "b" are not met.
- d. All grant and loan recipients must provide to the board a report on the use and effectiveness of the moneys granted or loaned on a periodic basis as determined by the board.
- 5. Notwithstanding section 8.33, moneys credited to the Iowa power fund shall not revert to the fund from which appropriated.

SUBCHAPTER II FINANCIAL INCENTIVES FOR BIOMASS, BIOREFINERY, RENEWABLE ENERGY, AND ENERGY EFFICIENCY PROJECTS

Sec. 10. NEW SECTION. 469.31 DEFINITIONS.

As used in this chapter, unless the context otherwise requires:

- 1. "Agricultural animal" means the same as defined in section 717A.1.
- 2. "Alternative and renewable energy" means energy sources including but not limited to solar, wind turbine, waste management, resource recovery, recovered energy generation, refuse-derived fuel, hydroelectric, agricultural crops or residues, hydrogen produced using renewable fuel sources, and woodburning, or relating to renewable fuel development and distribution.
- 3. "Biobased material" means a material in which carbon is derived in whole or in part from a renewable resource.
- 4. "Biobased product" means a product generated by blending or assembling of one or more biobased materials, either exclusively or in combination with nonbiobased materials, in which the biobased material is present as a quantifiable portion of the total mass of the product.

¹ The word "improving" probably intended

² The word "reducing" probably intended

- 5. "Biomass" means organic material that is available on a renewable or recurring basis, including but not limited to crops; plants, including aquatic plants and grasses; residues; trees grown for energy production; wood waste and wood residues; fibers; animal wastes and other waste materials; animal fats; and other fats, oils, and greases including recycled fats, oils, and greases.
- 6. "Biorefinery" means a cluster of biobased industries producing power, fuel, materials, chemicals, and products.
- 7. "Cellulosic biomass renewable fuel" means renewable fuel derived from an lignocellulosic or hemicellulosic matter that is available on a renewable or recurring basis, including dedicated energy crops and trees, wood and wood residues, plants, grasses, agricultural residues, fiber, animal wastes and other waste materials, refuse-derived fuel, and municipal solid waste.
 - 8. "Crop" means the same as defined in section 717A.1.
- 9. "Recovered energy generation" means a recycled energy system, other than a system whose primary purpose is the generation of electricity, which produces electricity from currently unused waste heat resulting from combustion or other processes and which does not use an additional combustion process.
 - 10. "Renewable fuel" means a fuel that is all of the following:
 - a. A motor vehicle fuel that is any of the following:
- (1) Produced from grain; starch; oilseed; vegetable, animal, or fish materials, including but not limited to fats, greases, and oil; sugar components, grasses, or potatoes; or other biomass.
- (2) Natural gas produced from a biogas source including but not limited to a landfill, sewage waste treatment plant, animal feeding operation, or other place where decaying organic material is found.
- b. Used to replace or reduce the quantity of fossil fuel present in a motor fuel mixture used to operate a motor vehicle.

Sec. 11. <u>NEW SECTION</u>. 469.32 FINANCIAL INCENTIVES RELATING TO PRODUCTS FOR BIOREFINERIES — AUTHORIZATION.

The Iowa power fund board, with the assistance of the office of energy independence and other appropriate state agencies, may provide financial incentives and adopt necessary rules pursuant to chapter 17A in relation to the following:

- 1. Research, development, and commercialization of products derived from or developed for biorefineries, including but not limited to:
- a. Renewable fuel such as cellulosic biomass renewable fuel, and associated agricultural or industrial coproducts which promise to provide environmentally benign product life cycles, promote rural economic development, and diversify energy resources.
 - b. Products to be used as feedstuffs for agricultural animals.
 - c. Other products to add value to the biorefinery supply chain.
- 2. Research, development, and commercialization of specialized crop varieties for use in biorefineries, equipment in production and harvesting, soil conservation, and crop management practices designed for sustainability.
- 3. Research, development, and commercialization of advanced manufacturing and information technology required for supporting biorefineries.
- 4. Market development of biorefinery products, including but not limited to public education, quality testing, transportation, and infrastructure financial support.

Sec. 12. <u>NEW SECTION</u>. 469.33 FEDERAL BIOMASS RESEARCH AND DEVELOP-MENT PROGRAMS — AUTHORIZATION.

The Iowa power fund board, the office of energy independence, and other appropriate state agencies, shall cooperate with federal agencies and participate in federal programs including but not limited to programs under the federal Biomass Research and Development Act of 2000, 7 U.S.C. § 7624, et seq., in order to provide for the production of cost-competitive industrial products derived from biomass, including but not limited to renewable fuels, such as cellulosic biomass renewable fuels or biobased materials and biobased products, and associated agricul-

tural or industrial coproducts which promise to provide environmentally benign product life cycles, promote rural economic development, and diversify energy resources.

Sec. 13. <u>NEW SECTION</u>. 469.34 FINANCIAL INCENTIVES FOR RENEWABLE ENERGY PRODUCTS — AUTHORIZATION.

The Iowa power fund board, with the assistance of the office of energy independence and other appropriate state agencies, may provide financial incentives and adopt necessary rules pursuant to chapter 17A in relation to the following:

- 1. Research, development, and commercialization of renewable energy.
- 2. Market development of renewable energy, including but not limited to public education, quality testing, transportation, transmission, and infrastructure.

Sec. 14. <u>NEW SECTION</u>. 469.35 FINANCIAL INCENTIVES FOR ENERGY EFFICIENCY PROJECTS — AUTHORIZATION.

The Iowa power fund board, with the assistance of the office of energy independence and other appropriate state agencies, may provide financial incentives to individuals or communities and adopt necessary rules pursuant to chapter 17A in relation to the following:

- 1. Research, development, and commercialization of technologies and practices that improve energy efficiency.
 - 2. Implementation of technologies and practices that improve energy efficiency.
 - 3. Public education efforts encouraging improved energy efficiency.

Sec. 15. Section 473.7, subsection 1, Code 2007, is amended to read as follows:

- 1. Deliver to the general assembly by January 15, 1990, a plan for the development, management, and efficient utilization of all energy resources in the state. The plan shall evaluate existing energy utilization with regard to energy efficiency and shall evaluate the future energy needs of the state. The plan shall include but is not limited to the following elements: Assist the director of the office of energy independence with preparation of the Iowa energy independence plan as provided in section 469.4. In addition to assistance requested by the director, the department shall supply and annually update the following information:
 - a. The historical use and distribution of energy in Iowa.
- b. The growth rate of energy consumption in Iowa, including rates of growth for each energy source.
- c. A projection of Iowa's energy needs at a minimum of ten years into the future through the year 2025.
- d. The impact of meeting Iowa's energy needs on the economy of the state, including the impact of energy efficiency and renewable energy on employment and economic development.
- e. The impact of meeting Iowa's energy needs on the environment of the state, including the impact of energy production and use on greenhouse gas emissions.
- f. An evaluation of alternative renewable energy sources and uses of energy, including the current and future technological potential for such sources.
- g. Legislative recommendations that may be necessary as a basis for a state policy for the development and efficient utilization of energy resources.
- h. An evaluation of the ability of existing laws and regulations surrounding the utilization of energy resources.

The department shall develop the plan with the assistance of, and in consultation with, representatives of the energy industry, economic interests, the public, and other interested parties. The department shall submit a report to the general assembly concerning the status and implementation of the plan on a biennial basis. The biennial update shall contain an evaluation of all state energy programs including expected versus actual benefits and forecasts of future energy demand in Iowa.

- Sec. 16. Section 476.6, subsection 14, Code 2007, is amended to read as follows:
- 14. ENERGY EFFICIENCY PLANS. Electric and gas public utilities shall offer energy effi-